



SOAP Version 1.2 Part 1: Messaging Framework

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Please refer to the [errata](#) for this document, which may include some normative corrections.

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Abstract

SOAP Version 1.2 is a lightweight protocol intended for exchanging structured information in a decentralized, distributed environment. "Part 1: Messaging Framework" defines, using XML technologies, an extensible messaging framework containing a message construct that can be exchanged over a variety of underlying protocols.

Status of this Document

This section describes the status of this document at the time of its publication. Other documents may supersede this document. The latest status of this document series is maintained at the W3C.

This document is a [Recommendation](#) of the W3C. This document has been produced by the [XML Protocol Working Group](#), which is part of the [Web Services Activity](#). It has been reviewed by W3C Members and other interested parties, and has been endorsed by the Director as a W3C Recommendation. It is a stable document and may be used as reference material or cited as a normative reference from another document. W3C's role in making the Recommendation is to

(e.g. retry counts), and MAY transmit such information to adjacent nodes. For example, some bindings take a message delivery address (typically a URI) that is not within the envelope.

5. SOAP Message Construct

A SOAP message is specified as an XML infoset that consists of a *document information item* with exactly one member in its [children] property, which MUST be the SOAP *Envelope element information item* (see [5.1 SOAP Envelope](#)). This *element information item* is also the value of the [document element] property. The [notations] and [unparsed entities] properties are both empty. The [base URI], [character encoding scheme] and [version] properties can have any legal value. The [standalone] property either has a value of "yes" or has no value.

The XML infoset of a SOAP message MUST NOT contain a *document type declaration information item*.

SOAP messages sent by initial SOAP senders MUST NOT contain *processing instruction information items*. SOAP intermediaries MUST NOT insert *processing instruction information items* in SOAP messages they relay. SOAP receivers receiving a SOAP message containing a *processing instruction information item* SHOULD generate a SOAP fault with the value of Code set to "env:Sender". However, in the case where performance considerations make it impractical for an intermediary to detect *processing instruction information items* in a message to be relayed, the intermediary MAY leave such *processing instruction information items* unchanged in the relayed message.

Element information items defined by this specification that only have *element information items* defined as allowable members of their [children] property can also have zero or more *character information item* children whose character code is amongst the white space characters as defined by XML 1.0 [XML 1.0]. Unless otherwise indicated, such *character information items* are considered insignificant.

Comment information items MAY appear as children and/or descendants of the [document element] *element information item* but not before or after that *element information item*. There are some restrictions in the processing model with respect to when *comment information items* can be added and/or removed (see [2.7.2.1 Relayed Infoset](#)).

5.1 SOAP Envelope

The SOAP *Envelope element information item* has:

- A [local name] of *Envelope*.
- A [namespace name] of "http://www.w3.org/2003/05/soap-envelope".
- Zero or more namespace qualified *attribute information items* amongst its [attributes] property.
- One or two *element information items* in its [children] property in order as follows:
 1. An optional *Header element information item* (see [5.2 SOAP Header](#)).
 2. A mandatory *Body element information item* (see [5.3 SOAP Body](#)).

5.1.1 SOAP encodingStyle Attribute

X. RELATED PROCEEDINGS APPENDIX

None.